

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

September 5, 2007

Ms. Shirley J. Olinger, Acting Manager Office of River Protection United States Department of Energy P.O. Box 450, MSIN: H6-60 Richland, Washington 99352

Mr. William S. Elkins, Project Director Bechtel National, Inc. 2435 Stevens Center Place, MSIN: H4-02 Richland, Washington 99354



**EDMC** 

Re: Submittal of Hanford Facility RCRA Permit Modification Notification Form 24590-LAW-PCN-ENV-07-002; Class <sup>1</sup>1 Modification to the Hanford Facility Dangerous Waste and Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit 10 (Waste Treatment and Immobilization Plant), WA7890008967

Dear Ms. Olinger and Mr. Elkins:

The Department of Ecology approves the referenced Class <sup>1</sup>1 Modification submitted August 17, 2007. The approved Hanford Facility RCRA Permit Modification Notification Form is enclosed.

Modification 24590-LAW-PCN-ENV-07-002 provides the following updated Piping and Instrument Diagrams:

- 24590-LAW-M6-LCP-P0001, Revision 3 for the Low Activity Waste (LAW)
   Concentrate Receipt Process System Concentrate Receipt Vessel (LCP-VSL-00001).
- 24590-LAW-M6-LCP-P0002, Revision 2 for the LAW Concentrate Receipt Process System Concentrate Receipt Vessel (LCP-VSL-00002).

The parties agree that during the transition period from permit drawings to engineering source drawings, items not requiring an installation inspection or inclusion in the Independent Qualified Registered Professional Engineer report may be shown in phantom. Ecology is approving the design changes identified in the Permittees' submittal. However, decisions regarding the regulation of items shown in phantom will be made at a later date. At the end of the transition period, permit submittals will contain engineering source documents and will be incorporated into the permit as described in Ecology Publication # 07-05-006 (www.ecy.wa.gov/biblio/nwp.html).

Ms. Olinger and Mr. Elkins September 5, 2007 Page 2

If there are any questions, contact me at 509-372-7882 or Tracy Gao at 509-372-7901.

Sincerely,

Dundus Buh Muhul Brenda Becker-Khaleel WTP Permit Writer

**Nuclear Waste Program** 

aah/jc Enclosure

cc electronic w/enc:

John Eschenberg, USDOE

Lori Huffman, USDOE

Tony McKarns, USDOE

Gae Neath, USDOE

Don Sommer, USDOE

William Taylor, USDOE

Brad Erlandson, BNI

Peggy Fisher, BNI

Stan Hill, BNI

Dennis Klein, BNI

Sandi Murdock, BNI

Phil Peistrup, WGI

cc w/enc:

Administrative Record: Tank Waste Treatment Requirements

**Environmental Portal** 

**USDOE-ORP Correspondence Control** 

Date

# Hanford Facility RCRA Permit Modification Notification Form Part III, Operating Unit 10

**Waste Treatment and Immobilization Plant** 

Index

Page 2 of 3: Hanford Facility RCRA Permit, Operating Unit 10, Waste Treatment and Immobilization Plant
Update LAW Vitrification Building Piping and Instrumentation Diagrams (P&IDs) for the LAW
Concentrate Receipt Process System Concentrate Receipt Vessel LCP-VSL-00001, LAW
Concentrate Receipt Process System Concentrate Receipt Vessel LCP-VSL-00002, in Appendix 9.2
of the Dangerous Waste Permit.

Submitted by Co-Operator:

Reviewed by ORP Program Office:

D A Klein

Date

S. J. Ølimaer

Class 1 modifications requiring prior Agency approval.

If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to a Class 1, if applicable.

Hanford Facility RCRA Permit Modification Notification Form				
Unit:	Permit Part & Chapter:			
Waste Treatment and Immobilization Plant	Part Ill, Operating Unit 10			

#### Description of Modification:

The purpose of this Class 1 prime modification is to update the following Piping and Instrumentation Diagrams (P&IDs) for the LAW Concentrate Receipt Process System Concentrate Receipt Vessel LCP-VSL-00001, LAW Concentrate Receipt Process System Concentrate Receipt Vessel LCP-VSL-00002. The following permit P&IDs are submitted to replace those currently in Appendix 9.2.

Appendix 9.2						
Replace:	24590-LAW-M6-LCP-P0001, Rev. 2	With:	24590-LAW-M6-LCP-P0001, Rev. 3			
	24590-LAW-M6-LCP-P0002, Rev. 1	ļ ·	24590-LAW-M6-LCP-P0002, Rev. 2			

The referenced P&IDs are complete revisions. They incorporate changes provided in applicable document change forms (e.g., DCN, SCN, SDDR, FCN, FCR, etc.) and changes associated with the resolution to comments on change documents since the issuance of the last revision of the permit drawing. This modification requests Ecology approval and incorporation into the permit. Revisions are the result of ongoing design changes. The following identifies the significant types of changes on the attached drawings.

### LAW Vitrification Facility - Piping and Instrumentation Diagram P&ID 24590-LAW-M6-LCP-P0001 (Rev. 3)

The DCNs associated with changes to P&ID 24590-LAW-M6-LCP-P0001 are provided in drawing Note 43.

- Revised physical layout of LCP-VSL-00005
- Added overflow line from LFP-VSL-00002
- Changed Quality Designator from CM to Q
- Added and/or revised notes 1, 28 through 33 and Note 40 and their callouts such as symbols and legends, slopes, valve locations, and system designators
- Added slope notation to numerous lines
- Added magnetic flow meter and associated instrumentation to pump discharge lines
- Corrected off-sheet coordinates
- Added ISA lines to bulges
- Added seismic category and quality flag designators
- Added nozzle size to vessel nozzles
- Incorporated various editorial comments

### LAW Vitrification Facility - Piping and Instrumentation Diagram P&ID 24590-LAW-M6-LCP-P0002 (Rev. 2)

The DCNs associated with changes to P&ID 24590-LAW-M6-LCP-P0002 are provided in drawing Note 39.

- Revised Notes 1, 11 & 30 such as symbols and legends, slopes, system and vendor designations
- Revised physical layout of LCP-VSL-00006
- Changed Quality Designator from CM to Q
- Added overflow line from LFP-VSL-00004
- · Added slope notation to numerous lines
- Modified depiction of vessel vent lines to show lines going into vessel
- Added magnetic flow meter and associated instrumentation to pump discharge lines

Class 1 modifications requiring prior Agency approval.

If the proposed modification does not match any modification listed in WAC 173-303-830 Appendix I, then the proposed modification should automatically be given a Class 3 status. This status may be maintained by the Department of Ecology, or down graded to a Class '1, if applicable.

#### 24590-LAW-PCN-ENV-07-002

Quarter Ending September 30, 2007

- Corrected off-sheet coordinatesAdded ISA lines to bulges
- Added seismic category and quality flag designators
- Added nozzle size to vessel nozzles and deleted N21, N22, and N23 and added N18

<ul> <li>Added label for LCP-BULGE-00001</li> <li>Re-routed sample supply and return lines to ASX-SAMPLER-00012 from ASX-SAMPLER-00013</li> <li>Incorporated various editorial comments</li> </ul>									
The following is a list of outstanding change documen None	ts that have no	ot been incorpo	rated into this r	modification:					
				<b>.</b>					
	·	•							
		·		· · · · · · · · · · · · · · · · · · ·					
WAC 173-303-830 Modification Class: 12	Class 1	Class 1	Class 2	Class 3					
Please mark the Modification Class:		X							
Enter Relevant WAC 173-303-830, Appendix I Modific number:	ation citation	N/A							
Enter wording of WAC 173-303-830, Appendix I Modif		1 -	•						
In accordance with WAC 173-303-830(4)(d)(i), this mo approved as a Class <sup>1</sup> 1 modification. WAC 173-303-8 changes that keep the permit current with routine chan substantially alter the permit conditions or reduce the cenvironment. In the case of Class 1 modifications, the	30(4)(d)(ii)(A) a nges to facility of capacity of the	states, "Class 1 or its operation. facility to prote	modifications a These change ct human health	apply to minor es do not					
Modification Approved: Yes No (state rea	<b>'</b>	Reviewed by Ecology:							

B. Becker-Khaleel